





Why Manuli?

Manuli Hydraulics is focused on achieving excellence in the design, manufacture and supply of fluid conveyance solutions, components and associated equipment for high pressure hydraulics, refrigeration and oil and marine applications.



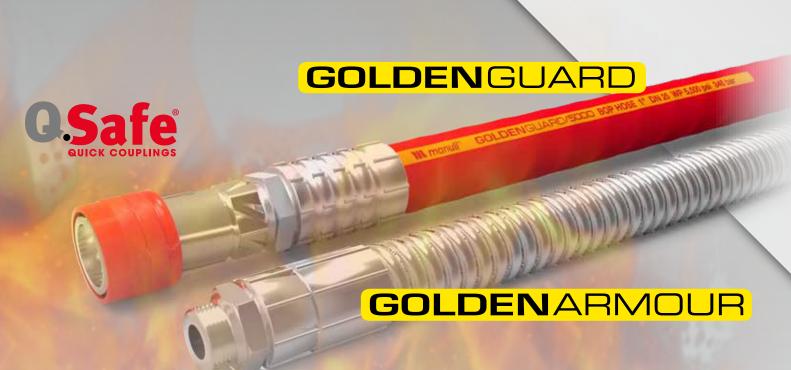
An integrated approach

Modern hydraulics applications require robust fluid connector solutions with guaranteed long lasting performance. To that end, Manuli Hydraulics offers a complete range of hoses, fittings and assembly equipment which are designed to work seamlessly together. This harmonised approach allows us to guarantee the quality and performance of hose assemblies in a way that our competitors simply cannot match.

Quality and sustainable development are the driving forces of all Manuli Hydraulics'

From design to manufacture and assembly, our commitment to this unified philosophy makes us the global leader in providing integrated solutions for hydraulic connector applications.

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BOP Hoses and Quick Couplings

BOP equipment on drilling rigs is essential to ensure safety in the field. Required to perform under the harshest operational conditions, these systems can mean the difference between life and death for drilling rig operators.

Manuli Hydraulics have developed two hose solutions designed specifically for BOP applications:

GoldenGuard - Available in both 3,000psi and 5,000psi ratings, this hose has a unique cover compound, Brickoat[™], which allows it to exceed the fire test requirements of API 16D specifications and is also DNV type approved.

| Standards | Lengths | Sizes | Working Pressure | Temperature Ranges |
|-----------|---------|------------------------|-------------------------|---------------------------|
| API 16D | 45m | 3/4" and 1" 3/8" to 2" | 3,000psi 5.000psi | -40°C to +121°C |

GoldenArmour - A premium-quality hydraulic hose enclosed in a stainless-steel armoured sleeve. API 16D compliant, this solution also offers outstanding resistance to abrasion and mechanical damage.

| Standards | Lengths | Sizes | Working Pressure | Temperature Ranges |
|-----------|---------|------------|-------------------------|---------------------------|
| ΔPI 16D | 45m | 1/3" to 2" | 5 000nsi | -40°C to +121°C |

In addition, Manuli Hydraulics offers a range of dedicated BOP quick couplings as part of our Q.Safe® range, which exceed the fire test requirements of API 16D and are painted red for easy identification.

| Product | Standards | Safety Factor | Sizes | Working Pressure | Temperature Ranges |
|---------|-----------|---------------|---------------|---------------------|-----------------------|
| MQS-BOP | ISO 7241B | 4:1 | ½", ¾" and 1" | 5,000psi | -20°C to +200°C |
| MQS-FS | | 4:1 | 5/8" to 11/2" | 5,000psi | -30°C to +110°C |

Manuli Hydraulics Drilling Division

Founded on the experience of 80 years of design and manufacture of high-pressure hydraulic connectors, the Manuli Hydraulics Drilling Division was formed with the aim of driving value into the customers' drilling processes. With a dedicated team of design engineers and experienced sales representatives, Manuli Hydraulics Drilling Division is fully geared to ensuring that the customers' precise needs are met with reliable, durable and innovative solutions.

Our drilling products manufacturing and assembly facilities operate a quality assurance system which is fully compliant with API Q1 (9th Edition) requirements, and which allows us to exercise complete control of all aspects of the hose assembly build and validation process.



Rotary and Vibrator Hose

Used to convey high-pressure drilling liquids (mud) in drilling rigs, rotary and vibrator hoses are at the core of the drilling process. GoldenDrill™ hoses by Manuli come in a variety of sizes (between 2" and 4") and pressure ratings (4,000psi to 7,500psi) to suit most applications.

Manufactured to API 7K, FSL 1, and drawing on Manuli's extensive experience of developing high-quality hydraulic connectors, this is a hose to redefine industry expectations.

| Standards | Lengths | Sizes | Working Pressure | Temperature Ranges | |
|-----------------------------|-----------|---|--|------------------------------------|--|
| API 7K, FSL 1, ISO 14693 | Up to 45m | 2" to 3" 3" to 4" 2" to 4" ^(†) | Grade C - 4,000psi Grade D - 5,000psi Grade E - 7,500psi | -20°C to +100°C -46°C to +100°C | |

(†) Grade E - 4" available soon



Cement Hose

GoldenCement™ hoses by Manuli Hydraulics have been specifically designed to withstand the high pressures required when conveying the cement slurries used to fix drill casings in place. Equally suited to both land and off-shore applications, and manufactured to API 7K, FSL 0, this is a high performance hose that is equal to the toughest challenges.

| Standards | Lengths | Sizes | Working Pressure | Temperature Ranges |
|-----------------------------|-----------|----------|-------------------------|------------------------------------|
| API 7K, FSL 0, ISO 14693 | Up to 45m | 2" to 3" | 10,000psi | -20°C to +100°C -46°C to +100°C |

Grease Injection Hose

GoldenDrill/H™ hoses comprise of a high quality rubber hose with a compact wire spiral structure, allowing for high flexibility, excellent kink resistance and outstanding performance when compared to thermoplastic solutions.

| Standards | Lengths | Sizes | Working Pressure | Temperature Ranges |
|--------------------|-------------------------------------|-------|-------------------------|---------------------------|
| Manuli Standard | Longer than 50ft 100ft fixed length | 1/2" | 15,000psi | -40°C to +100°C |

Motion Compensator Hose

GoldenWave™ hoses are the perfect solution for off-shore rigs which require a reliable solution for connecting the pressure accumulator to the hydraulic cylinders on the derrick, whilst compensating for the rig movement.

| Standards | Lengths | Sizes | Working Pressure | Temperature Ranges |
|--------------------------|-----------|----------|-------------------------|---------------------------|
| ISO 18752-B, SAF J517 | Up to 45m | 2" to 3" | 3,000psi | -40°C to +100°C |

Bulk Material Transfer Hose

Working with high flow rates, XtraFlow™ hoses offer the perfect solution for off-shore and industrial fluid transfer applications. These hard wall hoses are supplied with compatible fittings for optimum reliability and performance. All products are lab tested and validated in the field.

| Standards | Lengths | Sizes | Working Pressure | Temperature Ranges |
|-----------|-----------|-----------|-------------------------|---------------------------|
| ISO 18752 | Up to 45m | 2½" to 4" | 500psi to 2,000psi | -40°C to +100°C |

Connectors, Fittings and Accessories

Manuli Hydraulics offers a wide selection of specially designed fitting termination ends for rotary drilling applications. With a range of bevelled to weld fittings with integrated inserts and ferrules, we can supply any termination end required. All welding is carried out by qualified engineers according to ASME IX procedures.

Termination ends comply with API 16A, API 6A, API 5B, API 5L, API 16BX, API 6B and API 6BX.

Fittings design, qualifications and control methods comply with API 7K, API 7L, ASME IX, ASTM and E709.

In addition Manuli Hydraulics also offers a wide range of accessories including lift eyes, safety clamps and metal sleeves in both metric and imperial sizes.

